

ABSTRACT OF THE DISCLOSURE

A magnetic recording head comprises a write pole having a pole tip adjacent to an air bearing surface, a return pole, a near field transducer positioned adjacent to the air bearing surface for producing near field radiation for heating a portion of a magnetic storage medium, wherein a thermal profile of the portion of the magnetic storage medium has a maximum gradient at a location subject to a magnetic write field produced by the write pole. A disc drive that includes the magnetic recording head and a method of recording using the magnetic recording head are also provided.